Paragraph	Questions or Statements at Issue	Concern	Response
C1.1.2	Is 2500 Ch/sec scanned realistic?		The requirement is for 10Hz, with potential for 250 channels.
	Fully programmable and maintainable my CCAD employees.	What are their skill sets?	CCAD has individuals with experience in most high-level computer languages and PLCs
	Firmware must be delivered and non-proprietary.	Need to tell CCAD that firmware within instrumentation is not deliverable. This would include our throttle software.	The requirement is for the data acquisition software and any coding within sensors which must be maintained on site.
C1.1.4	What is the LAN connectivity provided by CCAD?	This could be very labor intensive paperwork and approval documentation required. Tunneling through government firewalls difficult to get approval for. Is this pre-approved?	The requirement for monitoring will be within the CCAD facility, and the industrial LAN. Outside access to the information is, as you point out, beyond the realistic scope of building this system. After discussion with CCAD/IT, the requirement for external monitoring is rescinded.
C1.1.5	…shall interface with all the engine test,...	How are they connected? What do you mean when you say interface between cells?	This requirement has been overcome by event with the determination of WindowsXP as the standard. The requirement will remain for connection of the data system to the industrial LAN without regard to other DAQ systems and their format.
	…located in a central repository…	What is the specification of the existing central repository interface? Is a new portion or complete repository o be provided? Is this the CDRP?	The storage will be in a format for use in SQL Server format for access.
	Replacement integrated software system that can be used with the existing CCAD DAQ is preferred.	What is existing system? Hardware and software interface specification should be provided. Does new software have to run on the old system?	This will be a completely new system using COTS software. The existing system is currently being evaluated for upgrade for compatibility with WindowsXP.
	Test Initiation/Evaluation/Archive System	Will the new system be using existing Test Program Sets for the T700 and T55 engines?	The new system should provide for automatic test per the furnished DMWRs.
C3.3.3	Parallel computer system shall be installed…	Does this mean a separate computer to control for only facility related sensors?	This computer will connect to the MCC through a PLC and will need to be able to access engine test parameters to correlate information from the MCC.

		An architecture picture with detailed explanation during the industry will be required to make this clear.	
	Single Operator Workstation	Is the pilot/co-pilot arrangement figurative only or is two person operation required?	Two-person operation is required at CCAD. The arrangement is, in this case, figurative, although displays should look familiar to those the operators currently use. They do not need to be identical.
	Can we meet the "proven" closed loop requirement?	Do you have a specific system you recommend? Define what you mean by closed loop. There are variations and combinations of hardware and software that can make up a closed loop system. Is the dyno included in that control? Is this just within the throttle system or integrated with the TPS?	We have requested known test cell contractors for this reason. The closed loop system is to allow for fully automated testing of the engines per DMWR requirements. The cell should be self-contained in this regard. In addition, we require that manual control be available to handle contingencies and provide for running engines to troubleshoot problems with the automated system being off-line. The dyno will be within that loop.
	Open source software…	What is your definition of open source? Do you have something that is being used today?	LabVIEW appears to be the system of choice for many government and testing agencies. We have some experience with RSView and Wonderware. All will be considered.
C3.6.4	120 VAC	What are the total amps of the circuit?	The amperage availability is on the refurbishment drawings provided on line.
C3.9.7	Is there an automated computer control we have to follow?		No automated computer control currently exists, and the contract allows for contractors providing proposals.
Appx B	What scan rate is needed to define real time?	Define what you mean be real time?	10Hz sample rate.
Control and Stimulus Capabilities	…no delay or hysterisis…	Do you mean minimal delay or do you have some specified allowable parameter?	The intent is for there to be no perceptible delay, and that positioning is the same regardless of direction of approach. Again, this is measured as something perceptible to the operator.